

# Prospecting for Oleaginous and Robust *Chlorella* spp. for Coal-Fired Flue-Gas-Mediated Biodiesel Production

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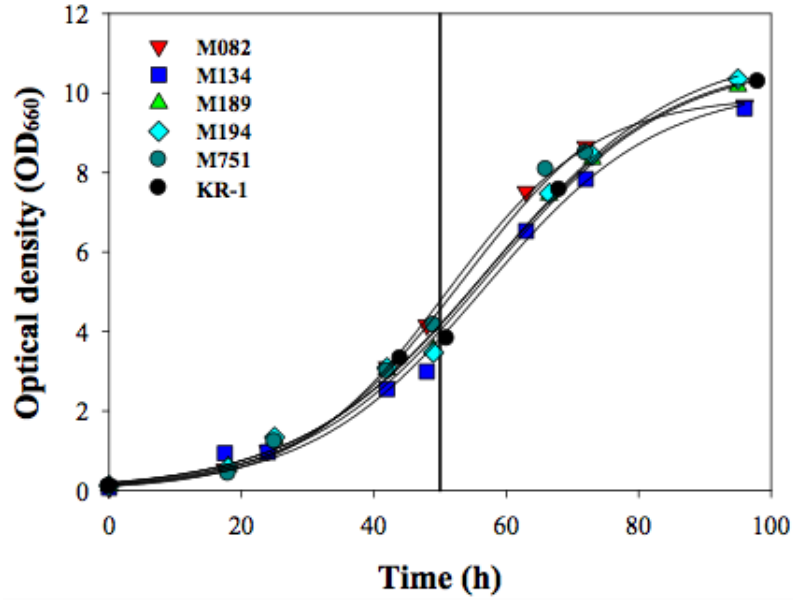
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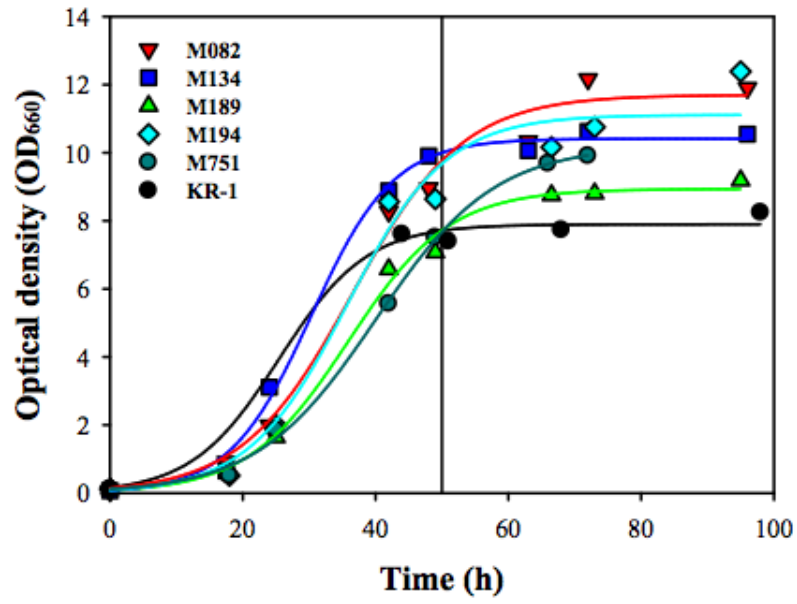
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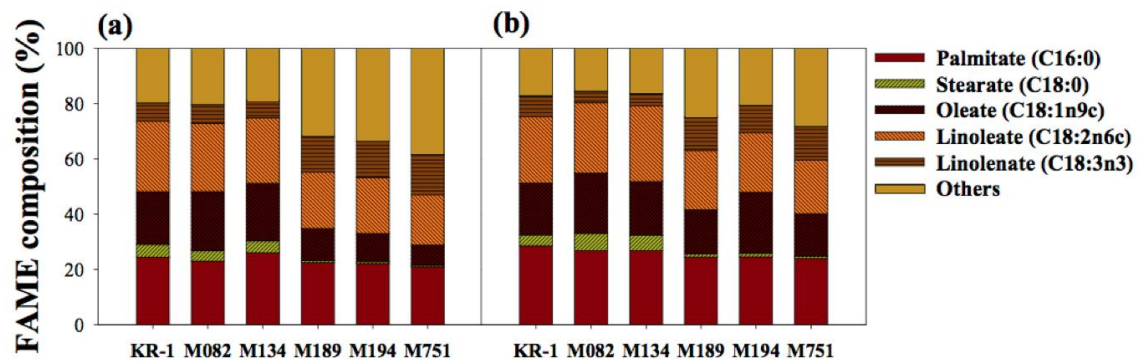
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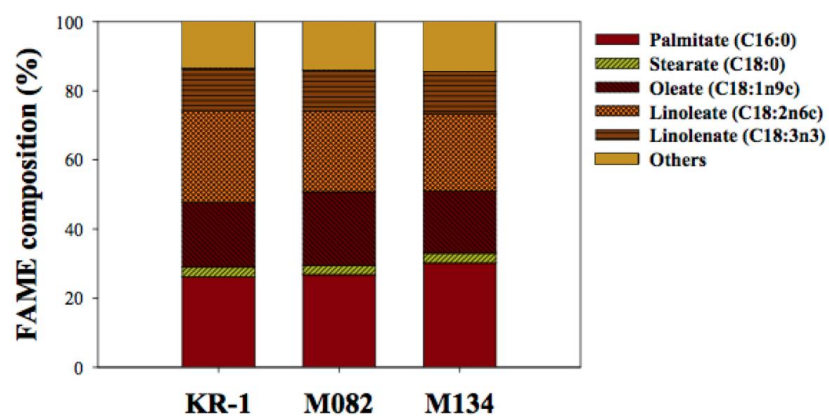
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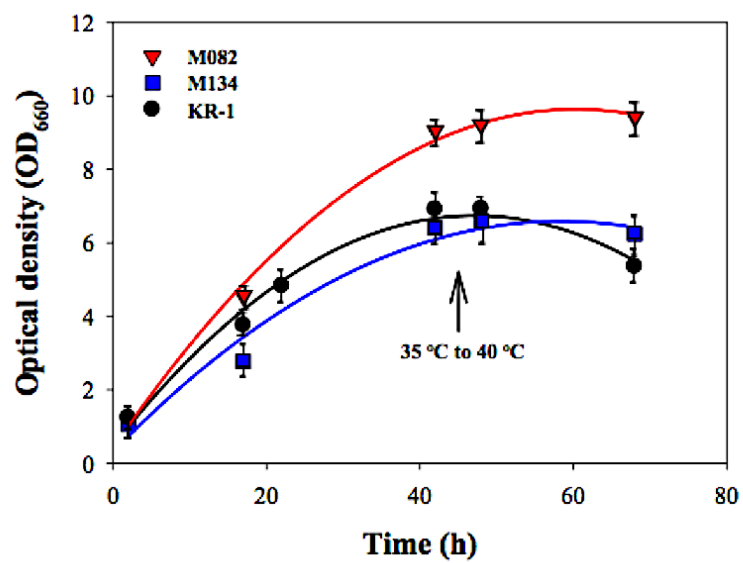
**Figure S1.** Growth curve of 6 fast-growing *Chlorella* strains under (a) autotrophic and (b) mixotrophic conditions for 96 h of cultivation. The mixotrophic cultures were supplemented with 5 g glucose/L. The vertical line represents the time point (50 h) used for screening the fast-growing strains.



**Figure S2.** FAME distributions of 6 fast-growing *Chlorella* strains under (a) autotrophic and (b) mixotrophic indoor conditions for 96 h of cultivation. The “other” FAMEs are caprate (C10:0), tridecanoate (C13:0), myristate acid (C14:0), pentadecanoate (C15:0), palmitoleate (C16:1),  $\gamma$ -linoleate (C18:3n6), arachidate (C20:0), cis-11-icosenoate (C20:1), behenate (C22:0), lignocerate (C24:0) and other fatty acids (group of fatty acids each accounting for less than 0.5% of total fatty acids).



**Figure S3.** FAME distribution of 3 high-productivity *Chlorella* strains in outdoor culture mediated by coal-fired flue-gas. The “other” FAMES are caprate (C10:0), tridecanoate (C13:0), myristate (C14:0), pentadecanoate (C15:0), palmitoleate (C16:1),  $\gamma$ -linoleate (C18:3n6), arachidate (C20:0), cis-11-icosenoate (C20:1), behenate (C22:0), lignocerate (C24:0) and other fatty acids (group of fatty acids each accounting for less than 0.5% of total fatty acids).



**Figure S4.** Growth patterns of 3 high-productivity *Chlorella* strains under high-temperature conditions. The arrow represents the time point of the temperature increase from the initial of 35 °C to 40 °C.